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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/769,741

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Ryan C. Lakin

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EXAMINER

WERNER, JONATHAN S

ART UNIT

PAPER NUMBER

3732

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/769,741	Applicant(s) LAKIN ET AL.	
	Examiner JONATHAN WERNER	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-37 and 44-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2,4-37,44-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to Applicant's amendment received 2/25/08.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4-19 and 21-37, 44-47, are rejected under 35 U.S.C. 103(a) as being unpatentable over Noiles (US 4,978,356) in view of Sullivan et al. (US 2003/0125810):

3. In regard to claims 1, 22, 27-28, 34-35 and 47, Noiles discloses an acetabular prosthetic (i.e. Figure 6) comprising: a bone engagement surface (outer surface of 64); a first inner integral generally spherical polished concave bearing surface (72) capable of directly engaging an articulating surface of a femoral component; and a locking mechanism (28) configured to couple a second prosthetic implant (12) having a second spherical concave bearing surface (see Figure 6), the second spherical concave bearing surface is configured to substantially surround a head (10) of the femoral component (30). As to claims 2, 6, 23, 26 and 29, said second prosthetic is a bearing insert (12). With respect to claim 4, the acetabular prosthetic further comprises a peripheral surface as shown in Figure 6 which defines said locking mechanism, and wherein said peripheral surface defines at least one aperture (81) configured to accept

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a coupling fastener. In re claim 5, said second prosthetic implant (12) comprises a polymer bearing surface (column 9, lines 3-5). As to claims 7-8, said bearing insert comprises an integral constraining ring (74) and wherein said bearing insert defines a bearing insert coupling groove (86) capable of accepting a locking ring. With regard to claims 9-10, 13, 25 and 30-31, another prosthetic is the metal constraining ring (74) which is partially spherical (see cross-section of Figure 8). With respect to claims 11-12, 16 and 44-46, the ring includes a groove (38) for locking the prosthetic to an additional prosthetic and a locking flange (78) with alignment notches (i.e. spaces between adjacent flanges). As to claim 15, the ring comprises a plurality of restraining lips (36). With regard to claims 17-19, the bearing insert (12) can act as a C-shaped reinforcement structure as shown in Figures 7-8. As to claim 21, the bearing surfaces as shown in Figure 6 define a capsule shaped cavity. With respect to claims 32-33, the bearing member (i.e. prosthetic member) of Noiles can further be readily replaced (column 4, lines 4-8). As to claim 36, one of the first and second prosthetic members has a generally cylindrical inner surface as shown in Figure 6.

4. Noiles fails to disclose the concave bearing surface being polished. Sullivan et al teach "the bearing surface of the prosthesis which should have minimum friction and maximum resistance to wear can be formed of a very hard material such as a high density ceramic or a CoCrMo alloy or other hard bio compatible material, polished to a smooth bearing surface" (see paragraph [0043]). It would have been obvious to one having ordinary skill in the art to incorporate a polished bearing surface such as that

taught by Sullivan et al into the prosthetic disclosed by Noiles in order to minimize the friction and maximize the wear resistance of the bearing surface.

5. Regarding claim 24, Noiles and Sullivan disclose the claimed invention except for the kit comprising a plurality of femoral prosthetic components. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include more than one femoral component within the kit, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

6. As to claim 37, Noiles and Sullivan disclose the claimed invention except for the generally cylindrical bearing surface having a length of about 1 to about 4mm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the bearing surface any desired length suitable for its intended use, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noiles ('356) in view of Sullivan et al., as applied to claim 9 above, and further in view of Noiles et al. (US 5,413,603):

8. Noiles ('356) and Sullivan disclose the acetabular prosthetic as previously described in detail above, but fail to disclose the flanges are elastically deformable. Noiles ('603) teaches an acetabular prosthetic in which the flanges on the coupling plate

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attached to the constraining ring are elastically deformable (column 4, lines 45-49).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to modify the device of Noiles ('356) and Sullivan by adding a coupling plate with elastically deformable flanges as taught by Noiles ('603) in order to protect the lining bearing during removal/replacement.

Allowable Subject Matter

9. The indicated allowability of claim 33 is withdrawn in view of the newly discovered reference(s) to Noiles (US 4,978,356). Rejections based on the newly cited reference(s) have been detailed above.

Response to Arguments

10. Applicant's arguments have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the newly cited prior art references described above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN WERNER whose telephone number is (571)272-2767. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jonathan Werner/
Examiner, Art Unit 3732

6/21/08

/Cris L. Rodriguez/
Supervisory Patent Examiner, Art Unit 3732